



PTO/SB/21 (09-04)

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## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/021,656
Filing Date	12-12-2001
First Named Inventor	Gary C. Johnson
Art Unit	3681
Examiner Name	Dirk Wright

Attorney Docket Number

<b>ENCLOSURES (Check all that apply)</b>		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input checked="" type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):
<b>Remarks</b> <small>This form covers amendments of: (1) Detailed Description of the Drawing (deleted)            (2) Detailed Description of the Invention of; 3-16-04 / 4-12-04 and 6-30-04 / 11-12-04 (deleted).            (3) Amendment of the Amendments of; 4-25-05 (deleted).</small>		
<i>also; New Matter Statement</i>		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name			
Signature			
Printed name	GARY C. JOHNSON		
Date	5-19-05	Reg. No.	

### CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	GARY C. JOHNSON	Date	5-19-05

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

.. a new differential having: a pinion differential incorporated with planetary gearing, the planetary gearing having a rotatable case/fixture of it's own.

3. a new differential having: a pinion differential incorporated with planetary gearing, the planetary gearing having a rotatable case/fixture of it's own, the said case being stationary/fixed to one of the axle bevel gears.

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### Description

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#### BACKGROUND OF THE INVENTION

[0001] This invention relates to a better vechicle differential, that prevents wheel slippage and wheel immobility.

[0002] On heavy-duty vehicles, limited slip differentials are not practicle. Heavy-duty vechles often use locking mechanisms to keep both axle sections rotating continuously, which is not always practical either, variability is disrupted

[0003] This new differential can use gears for drive force.

#### SUMMARY OF THE INVENTION

[0004] The new differential provides positive rotation to each axle section of a vehicle, under all road conditions, when the vehicle is on a level surface.

[0005] It will still allow variability between axle sections when needed on a curved path, but only allowing inversely proportional rotation, which is one of the advantages of the new differential.

[0006] The new differential, when used one for each set of drive axle sections, and being inversely installed; having the two different drive mechanism of one differential, diametrically opposed to the two different drive mechanisms of the other differential, will only allow diametrical wheel/axle section roll-back. Therefor at least one wheel on the left or right of the vehicle will have constant rotation capability.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 is a cross sectional view of the said new differential.

#### DETAILED DESCRIPTION OF THE DRAWINGS

[0008] In FIG. 1, the support member 1 supports the central case member 2, the case member 2 is the final resting place for pinion shafts 3 and 4. the axle shaft 5, has a gear 6 splined to it's end. The gear 7 is relatively stationary to the pinion case 8, being splined to the shaft 19. The shaft 19 being fixed to the central case member 2. The planetary gear case 9, having an axle shaft 10 splined to one of it's axial openings. The gear case 9 having a bevel gear 11 fixed/splined to it's other end. A bevel gear 12 being splined to axle shaft 5. the pinion gears 13 and 14 being relatively stationary to the main case 8. The gear case 9, having an axle shaft 10 splined to one of it's axial openings. The gear case 9 having a bevel gear 11 fixed/splined to it's other end. The gear case 9 having orbital gears 15 and 16 relatively stationary to the said case 9 by way of shafts 17 and 18 respectively. The end plate 20 is for the entrance

(12)

and containment of most of the members of the said new differential. The member 29 is a flat bearing.

[0009] In FIG. 1, wherein if one of either axle sections were to resist mobility, the faster rotating gear 6 or 7 will counter rotate the orbital gears 15 and 16, therein counter rotating the case 9 and it's splined axle shaft, therein the differential only allowing inversely proportional rotation.

\* \* \* \* \*



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Appn. Number : 10/021,656

Applicant : Gary C. Johnson

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- (11) Amendment [deletion] to; Detailed Description of the “Invention” of dates:  
3-16-04 / 4-12-04 and 6-30-04 / 11-12-04 - p. 15 - 23.
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- (15) Non-Compliant Notice of; 5-4-05 - p. 32, 33.



Appn. Number: 10/021,656

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Applicant : Gary C. Johnson

### CERTIFICATE OF MAILING

Certificate of Mailing for: Detailed Description of the Drawing [deleted],  
Detailed Description of the Invention of; 3-16-04 / 4-12-04 and 6-30-04 / 11-12-04  
[deleted], Amendment to the Amendments of; 4-25-05 [deleted], Detailed  
Description of the Invention [substitute], Claims 11-12 (new), REMARKS, Proof  
of Irreparable Damage statement, letter to applicant from; Ford Motor  
Company, Cover / amendment instruction sheet for; Claims, Cover / amendment  
instruction sheet for; Detailed Description of the Invention, Non-Compliant  
Notice of; 5-04-2005, Transmittal Form for: Amendment of the specification,  
amendment of the Claims and a New Matter statement.

I hereby certify that this correspondence is being deposited with the United  
States Postal Service with sufficient postage as first class mail in an envelope  
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on 5-19-05 (date) Signature Gary C. Johnson

GARY C. JOHNSON  
Typed or printed name of person signing Certificate



IN THE USPTO

APPN. NUMBER : 10/021,656  
APPN. FILED : 12-12-2001  
APPLICANT : GARY C. JOHNSON  
TITLE : JOHNSON (P.A.C.T.) DIFFERENTIAL  
Examiner : Dirk Wright  
ART UNIT : 3681

NEW MATTER STATEMENT

**Statement concerning New Matter:**

With this statement I, Gary C. Johnson attest to and verify that there is no "New Matter" contained in the enclosed amendments of; 5 - 19 - 05. The Claims and the Specification, have nothing that can be construed as new matter. The detailed description of the "drawing", sustained the previous drawing corrections that I had made. The enclosed detailed description of the "invention", is supported by the completed / corrected drawing and the newest claims; 11 and 12. There is nothing mentioned in the claims that isn't in the drawing (one figure).

Gary C. Johnson  
5-19-05

8-10



Appn. Number : 10/021,656

Applicant : Gary C. Johnson

Appn. Filed : 12-12-2001

Art Unit : 3681

#### STATEMENT OF IRREPARABLE DAMAGE

The enclosed; DETAILED DESCRIPTION OF THE INVENTION that I am submitting, needs to be entered because I had revealed my invention to Ford and Daimler-Chrysler in march of 2003. I sent each company a letter together, at the same time. Daimler-Chrysler never acknowledged what was sent in three attempts.

I have to presume that one of the companies mentioned above, came to the same conclusion ("Best Mode") that I had. I sent each company the renditions that I had invented, see; my Provisional Patent Application, filed 12-12-2000.

Gary C. Johnson

Signature Gary C. Johnson

Date 5-19-05

# Ford Motor Company

Ford Global Technologies, Inc.  
A Subsidiary of Ford Motor Company  
Consumer Innovation Office

P.O. Box 6234  
Dearborn, MI 48121-6234

Gary C. Johnson  
P.O. Box 10855  
Cols, OH 43201

Monday, March 26, 2001

ND No: 13131

Dear Gary C. Johnson:

Thank you for your recent letter. If you have specific concerns about the terms of our New Idea Disclosure and Confidentiality Waiver, I will be happy to address them. An updated copy of our Policies and Procedures is enclosed for your review.

As you know, we cannot review any external ideas submitted to the Company until we receive a signed Waiver. If you would like us to review your suggestion, please sign and return the enclosed Waiver. If you do not feel that our process fits your needs, I wish you luck in finding a suitable sponsor for your proposal, possibly a specialist manufacturer who supplies companies like Ford.

Feel free to contact me with any questions or problems, and as always, thank you for your interest in Ford Motor Company.

Sincerely,

*A.C. Leshan*

A.C. Leshan  
Manager, Consumer Innovation Office

313

322 - 6814

Consumer Innovation



## UNITED STATES PATENT AND TRADEMARK OFFICE

MAY 23 2005

32-52

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,656	12/17/2001	Gary Carlton Johnson		4604
7590	05/04/2005		EXAMINER	
Gary C Johnson 2064 Lafayette Detroit, MI 48207			WRIGHT, DIRK	
			ART UNIT	PAPER NUMBER
			3681	

DATE MAILED: 05/04/2005

5-4-05

Please find below and/or attached an Office communication concerning this application or proceeding.



## UNITED STATES PATENT AND TRADEMARK OFFICE

MAY 23 2005  
PATENT & TRADEMARK OFFICE

10/D21,656

COMMISSIONER FOR PATENTS  
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P.O. Box 1450  
ALEXANDRIA, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

## Notice of Non-Compliant Amendment (37 CFR 1.121)

33-35.

The amendment document filed on 11-12-04 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121. In order for the amendment document to be compliant, correction of the following item(s) is required. Only the corrected section of the non-compliant amendment document must be resubmitted (in its entirety), e.g., the entire "Amendments to the claims" section of applicant's amendment document must be re-submitted. 37 CFR 1.121(h).

THE FOLLOWING CHECKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

 1. Amendments to the specification:

- A. Amended paragraph(s) do not include markings.
- B. New paragraph(s) should not be underlined.
- C. Other ANY CHANGES MADE to specification from responses 7/31/03, 3/16/04 AND 6/30/04 MUST be submitted with markings to show changes.. See website.

 2. Abstract:

- A. Not presented on a separate sheet. 37 CFR 1.72.
- B. Other \_\_\_\_\_

 3. Amendments to the drawings: \_\_\_\_\_ 4. Amendments to the claims:

- A. A complete listing of all of the claims is not present.
- B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
- C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following 7 status identifiers: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New) and (Not entered).
- D. The claims of this amendment paper have not been presented in ascending numerical order.
- E. Other: Claims section Must be on Separate page from specification

For further explanation of the amendment formal required by 37 CFR 1.121, see MPPT Sec. 714 and the USPTO website at <http://www.uspto.gov/web/offices/pac/dapp/opla/prenotice/officerver.pdf>.

If the non-compliant amendment is a PRELIMINARY AMENDMENT, applicant is given ONE MONTH from the mail date of this letter to supply the corrected section which complies with 37 CFR 1.121. Failure to comply with 37 CFR 1.121 will result in non-entry of the preliminary amendment and examination on the merits will commence without consideration of the proposed changes in the preliminary amendment(s). This notice is not an action under 35 U.S.C. 132, and this ONE MONTH time limit is not extendable.

If the non-compliant amendment is a reply to a NON-FINAL OFFICE ACTION (including a submission for an RCE), and since the amendment appears to be a *bona fide* attempt to be a reply (37 CFR 1.135(c)), applicant is given a TIME PERIOD of ONE MONTH from the mailing of this notice within which to re-submit the corrected section which complies with 37 CFR 1.121 in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD ARE AVAILABLE UNDER 37 CFR 1.136(a).

If the amendment is a reply to a FINAL REJECTION, this form may be an attachment to an Advisory Action. The period for response to a final rejection continues to run from the date set in the final rejection, and is not affected by the non-compliant status of the amendment.

John Houser  
Legal Instruments Examiner (LIE)

571-272-1601

Telephone No.